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EDUCATION THROUGH SURVIVALS

Not long ago, in conversation with a scientist of some repute, I was met with the following retort: "You pedagogues are too much disposed to play a lone hand. You want to construct a science of education out of whole cloth. If you were more inclined to go over the field of science, which would involve knowing a little more about it, you might find some part of the field that is legitimately your own. Then get to work and make something of it. I hardly ever pick up an educational magazine that I do not have the feeling that somebody is in over his head in his philosophy, his psychology and his biology, too, when he tries to dabble in it." I reminded him of our recognized debt to all these disciplines. "That is all very well," was his reply, "but you don't get to the bottom of things."

And so the conversation ended. I was, at first, disposed to resent this outspoken accusation of dilettantism on the part of leaders in educational theory, but the more I have thought it over the more I am inclined to think that on the whole it is just. In any event, it expresses the generally prevailing opinion of students of the older sciences regarding our own. We may close our eyes to it if we will or attempt to justify ourselves through pleading the newness of our discipline; yet even then we have but slight sympathy, for since the time of Plato theories of instruction, if not a science of education, have furnished no narrow field for speculation.

It is my purpose in this paper to add to such speculation, through suggesting a possible field for a science of education, not at all with the feeling that the last word is being said and that henceforth and forever the question as to whether or not there is such a science is settled.

The more widely accepted definition of education is one which recognizes it as a process of adjustment: the adjustment of the individual to his environment together with a concomitant reaction of the individual upon his environment of such a nature that the latter is to a degree modified and controlled. The thought has been phrased in many ways, sometimes with the emphasis on the process of adjustment (the production of culture) and sometimes with the emphasis on control (the production of efficiency). No modern definition of education ignores the process as a whole nor attempts to make of education mere erudition. The science of education, then, may consider as within its legitimate field the findings of the older sciences which bear directly upon the processes of individual adjustment: the span of a lifetime.

But the science of biology treats precisely of this process writ large; the adjustment of the organic kingdom to its environment; the span of all the ages that have elapsed since the advent of those "specks of animated earth" thousands of centuries ago. Racial education.

What has the tremendous story of organic evolution, a story of adjustment from amoeba to man, to tell us of the shorter journey from human infancy to age?

In a general way we have accepted the dictum that the individual epitomizes the race. Herbart's contributions to this line

of thought interested us for a while, but we seem to have forgotten both him and them, so far as any important application of the principles involved to present-day educational practice is concerned.

The generally accepted scientific explanation of organic evolution—racial education—is the so-called Darwinian triad. This, in brief, is as follows:

(1) More animals are born than live to grow up.
(2) No two are alike.
(3) Those individuals grow up which the environment selects for living. The rest die.

Since I am accepting these theses—not defending them—nothing need be said at this point regarding the first. The second reads: "No two are alike." Animals differ in but two ways: in form—including size—and in behavior. The former is morphological and does not interest us in the present discussion. The latter does.

Behavior in its broad meaning—not the narrow schoolroom sense—is actuated by two seemingly distinct causes:

First: Reactions to stimuli within or without the organism so largely mechanical as hardly to come within the realm of the psychological at all: the engulfment of a diatom by an amoeba; the opening or closing of the sea anemone in response to light stimuli and thousands of other activities by both the lower animal and vegetable forms, perhaps even including such complicated behavior as that of the migration of birds and the building by them of elaborate nests.

But this class of activities is not by any means restricted to the lower forms. The new-born babe experiences it when his lips first seek the mother's breast and when cries come to indicate an organic need. In fact, during the first few weeks of life the human infant probably has no other activities than these instinctive ones, piled up by thousands of generations of ancestors who were his ancestors solely because they did these things, while others who became nobody's ancestors did not.

These innate tendencies to act I shall call *impulses*.

But as experienced by the activities of the lower animal kingdom, and most certainly by those of the child, certain behavior can not be accounted for in terms of these simple tendencies to act without emotional content. I have a dog that will not eat chicken and a small boy who refuses raisins, both being contrary to the usual reactions of their kind. They plainly have individual likes and dislikes which influence their behavior, as have all other dogs and children which have passed the stage of early infancy. Some children like rough-and-tumble games, while others do not. Some read poetry, while others will not touch it. Some like mathematics as a study, while others prefer history, and so on through the whole gamut of human likes and dislikes.

In this paper, I am using the term *interests* to cover that field of behavior which is actuated by likes and dislikes and which may be assumed to be beyond the limits of pure reflex.

But now let us return to our Darwinian triad and see where we stand.

No two (animals) are alike. Disregarding differences in form, it is precisely the differences in impulse and interest as I have defined these that make them unlike. They have made possible and at the same time have defined the limits of organic evolution (racial education). They are present in every child and just as certainly make possible and define the limits of the shorter process of individual education.

Here is the educational triad which I propose to defend:

(1) More impulses and interests are present in the child than persist.

(2) No two children are alike in impulses and interests.

(3) Those impulses and interests will persist which the environment selects for persistence.

This is nothing more nor less than the Darwinian hypothesis applied to the development of the individual. Impulses and interests are selected instead of organic forms, but the environment does the selecting in each case. Impulses and interests instead of individuals die, if they fail to meet the requirements.

But let us consider individually the three theses of the educational triad stated above.

More impulses and interests are present in the child than persist. Who that has seen the youngster in his own home develop from infancy, with its ceaseless though undirected movements of hands and feet, to youth, with its more selected gamut of motion directed to particular ends: or has seen the interest in anything and everything within the field of sense gradually narrow down to an intelligent interest in a comparatively few things can doubt its validity or can doubt the unwisdom of continuing them all, even were it possible.

Just what these impulses and interests of childhood are has been determined by a cumulative selection through thousands of generations of ancestors. We must accept them, whether we will or not. It is as much beyond our power to create a single one *de novo* as it is for a Burbank even to produce the initial variations in one of his flowers. Yet, as he with the variation once discovered can, by a process of selection, accentuate it until it becomes something hitherto unknown and undreamed of, so we by a proper selection of impulses and interests can bring about maximum possibility within the span of human life.

As in the process of racial education, nature is prodigal of her forms, so in the individual process she is prodigal of her impulses and interests.

But for us who are, as teachers, to guide in the process of selection, to act as it were in the ontogenetic process of intellect-breeders, it is not enough to know merely that there is this surfeit of motor and intellectual leads: we must know the order of their expression. For in the life of the child there is a progressive sequence of impulses and interests, just as in phylogeny there has been a progressive sequence of forms. Upon such a knowledge must depend the order of studies in the school curriculum. Nor is it enough to know the order merely. We must know that they are at least in the maximum of expression, but temporary. This characteristic is not peculiar to the impulses and interests of the child. We see it represented in the members of the lower organic kingdom. Only for a brief time are the delicate organs of the flower receptive to the dust of fertilization, and it must come then or the life has been in vain. The delicate tendril, too, meeting the support at the time nature intended, will become strong and fulfil its purpose: let the touch be but a few short days delayed and its function has been forgotten. The chick that has known no natural mother will within the first few days of life run to cover at the warning cluck of any motherly hen of the barnyard. Yet, let a few more days elapse before such warning is heard for the first time and the instinctive knowledge of its meaning has been outgrown. And so it is with the impulses and interests of childhood.

As to the second postulate of our educational triad—that no two children are alike—why waste time in its defence? We all know it is true.

So we come to the third. Those impulses and interests persist which the environment selects for persistence.

As with animals under domestication, the breeder may be considered the special phase of the environment that determines the par-

ticular individual best fitted to serve his purpose and so selects it for racial survival, denying to the rest any place in phylogeny, so the parent and the teacher working together during the period of individual infancy of the human being so control the environment that it shall put a premium upon the favorable variation and a penalty upon the unfavorable, bringing the former to its fullest development and suppressing the latter. Individual education is then but *the survival of the fittest among impulses and interests*, nothing more. And the business of the educator is simply that of controlling the environment of the child and so shaping it that every impulse and interest prophetic of usefulness is seized upon and perpetuated and developed, while those prophetic either of no positive usefulness or of disaster find no encouragement or are discouraged in a definite way.

Note, please, that this theory of education denies to the environment the possibility of originating *de novo* a single impulse or interest of the child. It must look for its leads, and having found them, make the most of them.

But, you ask, will this hypothesis of education through survivals account for the so-called learning process as we have observed it?

Let us see.

Considering first the motor side—the selection of impulses—it postulates that every element of movement possible to the human adult came first as an impulse—a reflex pure and simple; that learning to perform any act is nothing more nor less than the utilization and development of the appropriate impulses; that the environment is the sole factor in the determination of the appropriateness of impulses. In other words, the process, at least in the child, is an objective one.

How does this work out?

Among the first things that the child learns how to do—for he never learned to nurse nor to cry—is to talk. How did he do it?

Among the early impulses of the child are those elaborate coordinations of chest and throat which are evident to the ear rather than the eye, and produce sounds, a whole gamut of them, including the basis of every language, from English to Choctaw, and for aught I know Chimpanzee also. They just come because the youngster can't help it. Among the earlier of them is *ma ma ma ma ma*. And here the environment steps in, in the form of mama, who incidentally got her name that way, and selects that sound for persistence, by bestowing every sort of pat or hug that baby delights in. And baby hangs onto that sound. He didn't learn it any more than he learned how to nurse, although it came to him somewhat later in life.

Pretty soon he comes out with *da da da da*, and then daddy sees that he doesn't let that slip. And so on through the earlier stages of acquiring a vocabulary. Every time a sound comes that approximates a word, the environment—that is mama and papa, and particularly big sister—put a premium on it and it survives. But let us suppose that mama and papa and big sister are French or Chinese or Choctaw. What happens? Is the premium put on the same sounds? Not at all. The only difference is that the youngster hangs onto the sounds that make words in their language. And baby has learned to talk by forgetting how to make the sounds that do not count in the process. Babies born deaf make them all at first, but without the ear as a guide never learn which ones to forget and finally end up by forgetting them all.

I would not argue that this tells the whole story of learning to talk, for it does not, but I do maintain that it explains the beginning of it. The time comes when suggestion gives rise to some of the sounds

baby makes—still impulses only—and at a later stage, which lasts through life, imitation enters in. But even here the environment is the selective agency. Take, for example, a student in an American high school learning to pronounce the French *u*. When he made that sound impulsively as an infant, no premium was put upon it and it failed to survive. Now he imitates the teacher—perhaps fifty times and she (the environment) selects the successes for persistence, bestowing appropriate reward.

So much for learning to talk. How about learning to creep or to walk?

As the youngster gets along toward a year in age and can sit up, the impulsive movements which are constant during his waking hours show a marked change, and at the same time interests, in the sense we have defined them, appear. One of the earliest of the latter seems to be a sort of primitive wanderlust; a desire for a bigger world. From the time this shows itself the criterion of success in the selective process is the degree of contribution which each movement makes toward locomotion. It is possible that even at this stage of development there is a subjective element in this criterion, yet I am inclined to doubt it. It seems to me more probable that the environment is the sole selective agency, penalizing the unfit impulses either with negative success or with hard knocks. If this be so, the gamut of impulsive movements must differ materially with different children, for of my five youngsters one never crept at all; two did so more or less in the ordinary fashion; one pushed himself about seated on the floor, but always moving the way he faced, while one pushed himself, motion being sidewise. But it is my belief, based upon careful observation, that in no instance did a conscious desire for locomotion precede its actual accomplishment. In other words, the youngster found that he had moved, liked it and tried to do again what he had done to bring it about. I can, perhaps, illustrate this point by reference to what I believe to be the first instance in the life of any one of my children in which an *interest* appeared, in contradistinction to a mere *impulse:* an attempt to do a thing because he liked it and with a more or less definite conception of what he wanted to do. The boy, when perhaps three months old, was lying contentedly on the bed with hands and feet in constant motion. Suddenly a spasmodic movement of the hand thrust one thumb plumb into his mouth. He was plainly surprised at the new sensation, but there was no doubt that he liked it. In an instant a new spasmodic movement of the hands came and it was gone. He seemed to think it over a minute as though wondering how it had happened and how he could repeat it. In any event, he went to sleep before a second success occurred.

In the course of two or three weeks, he could put his thumb in his mouth. Did he learn to do it? No and yes! No, because he never did it better than the first time. Yes, because he could do it when he wanted to. He had gradually eliminated the unfit movements, leaving those only which contributed to the success of the thumb-in-mouth operation. There certainly was no element of imitation in the act, for he had never seen a thumb in a mouth until he saw his own.

This line of reasoning is just as applicable to any of the other acts that the baby performs—grasping, throwing, turning over, etc.—it being borne in mind that as he develops new impulses express themselves which form the bases of selection of the fit in the accomplishment of the new act.

If my contention is valid, these simple acts are born ready-made, together with many others, the so-called learning process for them being solely the elimination of the

many others. Just how far into adult life this thesis holds true it is difficult to say, but I am inclined to think that it is valid much more generally in the field of motor control on the part of the adult than has been generally accepted.

Let me illustrate.

Many years ago when a student in college I spent part of a vacation with a chum, an all-around athlete and pitcher on the varsity nine, at his home in the suburbs of a small city. The younger brother was a caddy on the local golf links and on one occasion was driving balls about the orchard with a midiron to which he had somehow fallen heir. My chum, who never before had had a golf club in his hands, seized the implement and made as sweet a drive as I have ever seen. Fully 200 yards it reached and would have brought a thrill even to the most experienced golfer. Quite set up by his exploit, he made the mistake of trying to do it over again, with a dismal foozle as the result. It took him three weeks of hard practice to do nine holes under 60 and he never made a better drive in his life than his first. What was learning to play golf for him? So far as driving from the tee is concerned, certainly nothing more than the elimination of the unfit in the matter of movements. When he teed up his first ball there in the orchard the necessary correlations between brain and muscle for a perfect drive were already established. But a lot more had also been established, probably because of his athletic practice, and when he addressed the ball and thought "drive" they came in and messed things up. His first shot was a fluke. But have you never seen a novice at bowling make a "fluke" strike? And at quoits a "fluke" ringer? For any adult with sufficient muscular development to play a game of skill at its best, the learning of that game is but a process of elimination of movements unfit to the game. In fact, motor control on the part of the well-developed adult is but this. It is as true with all manual acts as with games of skill.

An adult who takes up wood carving as an avocation may, during his first hour of practice, make one cut as true to the line as he ever accomplishes again. But how about the rest of his first hour's cuts? Most of them are bad ones that he must get rid of by long and tedious attempts.

With the growing child of common school age the problem is complicated by a developing musculation, concomitant with the process of elimination of useless movements. Flukes are less likely, if indeed they ever occur in operations which require much muscular strength, but in most skills acquired by the child under competent direction the conditions are not radically different.

It is quite probable that in the first line of a's written in the copybook there is at least one which will satisfy the most critical teacher. Learning to write a's is but forgetting how to make bad ones.

Although the acquisition of motor control—the learning to do things—is a process of eliminating the unfit movements, in practice, the converse mental attitude—that of the survival of the fittest—must be maintained to secure results. The law of the dynamogenesis of the idea is behind us here. Think the thing you want to do, and forget utterly the thing you do not want to do. Ideas capable of realizing themselves in motor activities tend so to realize themselves. I do not contend that every complex movement made by an adult was in its inception a single impulse in the child. No baby probably ever threw the head backward as far as does the contortionist in his vaudeville act. Yet he did throw it back a long way. The "headliner" merely accepted nature's lead and built upon it.

Probably no impulse pure and simple ever pitched a curved ball. Yet it is my

belief that within the gamut of impulsive movements were, within the limits of strength, all those essential to the production of a Walter Johnson.

But we are, after all, more interested in the intellectual than in the motor side of education. How does the theory of education through survivals work when applied to this phase of the process? The interests of the child are perhaps not as easy to catalog as are the impulses, being less evident to the eye. They are, too, more varied even than the latter, and perhaps less firmly fixed as racial assets, so it would not be strange if few of us should agree as to the more fundamental among them. Much, however, that is being done in correction with the child study movement helps us at this point, and students of education in the future will be in a better position to decide this question than are we.

First, in point of time, among the interests expressed by the child, it seems to me, is an interest in *rhythm;* a delight in a to-and-fro motion given to the whole body by some force from without. And this delight has given us the cradle and the nursery rocking chair and the mother's lullaby. Perhaps it harks back to primitive ancestors who were rocked to sleep on some swaying bough, perhaps the ceaseless ebb and flow of the waves on some prehistoric beach. Who knows?

Soon other expressions of the interest are evident, and baby is soothed by pats and caresses. Yes, and by the mother's lullaby, a rhythm of sound. And then comes a demand for Mother Goose and Riley and Stevenson. Finally for Longfellow and Whittier and Tennyson, if all goes well.

The intensity of the interest in rhythm varies much with different individuals, but is seldom if ever entirely lacking.

But why, you ask, develop such a seemingly useless interest in the child at all? All interests represented by children as a class are either of value to the child of the present generation or have been of value to his ancestors. And the interest in rhythm is no exception. In the lower races of mankind, rhythm has always been an accompaniment of the most ecstatic states and in a more subdued form is at the bottom of the love of poetry in every one of us. That is, if we have such a love. If we have not, the chances are that during those years when the love of rhythm was most pronounced in us—that is, the Mother Goose epoch—the home was so barren of it that the interest was allowed to languish and descend below the threshold of future usefulness.

I will venture the assertion that the youngster of five years, in a family where Mother Goose is taboo, where Riley and Stephenson and their ilk are unknown and where the spontaneously originated limerick so dear to the child is frowned upon, will never to his dying day feel a genuine love for Longfellow nor Tennyson nor Whittier.

But Mother Goose is doggerel, you say. So it is to you now. Yet it was not to you once, or the more's the pity. It is the child's poetry, meeting as fully his needs as ever can Browning. And without the former he will never know the latter.

The next fundamental interest which children as a class seem to express is not easy to define in a single word. Perhaps imagination comes nearer than any other, but it is characterized by fairy tales. Much has been written pro and con on this subject, and opinion differs widely as to their place in education.

But, after all, are they not an expression of the wanderlust just as truly as the baby's first attempts to creep? Will the child who has never gone to the ends of the world and far beyond into fairyland with Grimm and Anderson and has never had a

Santa Claus ever follow Dante and Bunyan and Goethe and St. John? Can anything but the purely material seem real to such a one? But they are not true, somebody says. They are the truest things in all the world to the child of six or seven years. Bye and bye they will not be. Nature takes care of all that, and they are lost without a shock and without the shattering of a single dream if only the child be let alone and given time to work out his own salvation. We are what we are to-day largely because of what we have forgotten.

And now comes adventure—fairy tales tied down somewhat by the increasing knowledge which the child has gained of the world and the laws which govern it. He can no longer travel on the back of a fairy, but he can in an aeroplane or a submarine. Once more the wanderlust.

Our ancestors conquered the world in the wilderness. Our children do so around the library table. There the boy of fourteen does noble deeds and prepares for other noble deeds just as truly as did any of his forbears on the field of battle. And if he has not done them there or under a tree, or in his room after lights are supposed to be out, or somewhere else, with Cooper or Henty or Alger, I doubt if he will ever do them elsewhere. And I doubt also if ten or twenty years later, standard books of travel or even of history will have any appeal.

The last general interest which I shall mention is one into which sex to an extent enters. It is romance. The little tot with her dolls expresses it in a way years before she becomes addicted to love stories. The interest reaches its fullest fruition at not far from the age when our ancestors married: that is, at adolescence. Our children can not marry at that age for reasons over which they have no control. But nature doesn't know that, and without the vicarious participation at that time in the romantic through literature, there is great danger that those instincts which make for the best in motherhood and the best in fatherhood will be lost. The race is not in danger of oversexing, but of the reverse, and anything we can do to develop the normal mating instinct at the same time developing character to hold it within bounds, is for the good of the race. No mother need have fear that any love stories which have stood the test of time will injure the daughter in her teens; but she may well consider the cost of too long a deprivation of them.

The safest way to bridge over the dangerous interval between the time when nature demands marriage and when society permits it, is through carefully selected romantic literature. Without it, in too many instances marriage will come, if at all, only because society demands it while nature passively permits.

In mentioning some of the more evident interests of children which may be considered nature's tips to those who may control the environment for purposes of selection, I have refrained from sermonizing on the obvious. Truth and honesty and cruelty and chastity and temperance and many others of a similar character might have been included. But what I have had more definitely in mind is that part of the selective process which has been more or less definitely assigned to the school and for the success or failure of which that agency is held responsible. From the point of view of this paper, the school is that part of the child's environment which is definitely and arbitrarily controlled for the purpose of discovering those impulses and interests of the child which are prophetic of greatest usefulness and of developing them to the maximum of possibility. If this differs in any essential from the ordinarily accepted definition of the school, it is in the emphasis placed on discovery and the implication that all the important interests will not be found in all the children; and the further

implication that if certain interests are not found in a given child we should recognize the fact and not waste its time and ours in an attempt to do the impossible. The completion of the ordinary subjects of the elementary school curriculum is not an impossibility for any normal child. The three R's should stand. It is to the so-called fads in education about which there is so much controversy—music, drawing, color work and manual training—that the principles of education through survivals especially applies at this stage and the necessity of keeping alive certain primitive literary interests, as already discussed, because of their future bearing, is important.

But, essentially, the first years of school are a try-out: a test to see what is there.

If I may be permitted a very material illustration: When a student completes his chemical course in qualitative analysis he is frequently given, as a part of his final examinations, a test tube containing various elements in solution, the identity of which he is to determine. This is his problem. He applies one reagent after another, with varying results. A drop from this bottle and nothing happens. A drop from this bottle and a white precipitate forms; from this a brown precipitate and so on with all the reagents on the shelf. Now he knows what was and what was not in the tube.

The child is our problem and the environment our reagents. But in the chemical laboratory the bottles were not filled with whatever happened to come handiest. Their contents were selected with the greatest of care to reveal any possible ingredient in the test tube. And so it must be with our controlled environment, the school. The various reagents must be there or we may miss something essential in our problem, the child. And once having discovered it, ours is the duty to make the most of it.

But let us not forget one important lesson from the test tube. If a single drop of the reagent produced no results the whole bottleful would fail to do so. Something essential to the reaction was lacking in the tube. This is true to a large extent with our problem, the child. It takes longer for our reagents to work, but if used at the right time and in the right way they are practically infallible. But if the thing isn't there, let us not proceed as though it were and waste time trying to make something out of nothing. We have an advantage over the chemist in one respect, and that is that some essential ingredients are always present in our problem, such as rhythm and the other general interests which I am discussing in this paper. But the more particular ones sometimes are not. A catalogue of these variables would somewhat resemble a list of the so-called fads in education, with, farther along in the course, such subdivisions of intellectual activity as the mathematical, the literary and various interests in the social field.

Some children simply do not have them to a degree that would warrant their devoting time to them beyond the period necessary to determine this fact. The try-out period should not be too short for interests to develop progressively, but I doubt if it should extend far into the secondary school period. If our reagents have been carefully chosen we should have at least a qualitative analysis completed by that time.

Then is the time to act. If John has sung off the key in the school chorus for eight years, it is long enough. For his own sake and that of the others let him put the time in at something better elsewhere. And Mary, whose mother thinks everybody should learn to draw, but who has wasted every art period since she entered school. It is time to listen to God and let her mother go.

And that other broken-hearted girl who failed to receive her diploma because she couldn't learn algebra. Give her the diploma, accepting those extra credits she had in history. With some persons mathemat-

ical ability was left out in their makeup. And what right have we to say that it is essential to culture? For efficiency along certain lines it is, but that poor girl was not seeking efficiency along those lines. She knew better than to try. And we, seemingly, have known no better than to set up a standard of culture which the law of universal variation makes impossible of attainment by some who are worthy.

Our educational organization takes scant cognizance of the divergent type. It tends to suppress rather than to develop it. Yet in the last analysis our hope rests upon these variations from the norm.

It is the way nature has worked in the past and without it there would have been no racial education. Without it there can be no progress in individual education. If the point of view presented in this paper has any value it should be through emphasizing this fact.

If the foregoing be a suggestive field for the science of education, what does it postulate? Bearing in mind my definition of impulse as an innate tendency to act and of interest as an innate tendency to like, the following would seem to be true:

(1) No impulse nor interest can be created *de novo* in the child by his environment. We can not educate (e—*ducere*) what is not there.

(2) The impulses and interests of the child are predetermined by the laws of organic evolution.

(3) Those impulses and interests which have played the longest rôle in organic evolution are least variable in the child and are common to all normal individuals.

(4) Motor control is established in the child through a process of elimination and not of acquisition.

(5) Imitation—as a conscious effort—plays no part in the beginnings of motor control. Romulus and Remus did not walk on all fours.

(6) Imitation in later life is largely the conscious attempt to copy one's own best results, though the criterion of success may be based upon a comparison with the best results of another.

(7) Directed education presupposes the arbitrary establishment of a selective environment, appropriate to the educational ideals of the people. We call this environment the school.

(8) It is the first function of the school to discover the interests of the child which best meet the prevailing educational ideal. Diagnosis must precede treatment.

(9) The lack of some particular interest once definitely determined, all efforts to develop it should cease. All interests present, which meet the educational ideal, should be developed so far as is necessary for cultural purposes, while the predominant interest should be developed to its maximum for purposes of efficiency.

(10) In education for culture alone, the appropriate rewards of progress should not be withheld because some interest, unessential to the race, is lacking.

(11) In education for efficiency, which is usually the development of some interest unessential to the race, appropriate rewards of progress should be withheld except when the most rigid requirements of the selective environment are met.

EDWIN G. DEXTER

DEFINITION OF ART EDUCATION

THE production of all works of art, as well as the interpretation and understanding of them, is obviously controlled by education, which seeks ever to propagate and to perfect a higher type of art, to enlighten the consumer of art products and to train the artist. Education being concerned with the improvement and final perfection of conduct through experience, we shall assume at the outset that the formulating of definitions is an educational function. It is for the educator to define art terms in order that by means of his definitions the standards of taste and skill shall be raised.

Nevertheless, we who are most concerned about art, especially in its relation to industry and commerce, should make diligent effort to come to a consensus of opinion on the meaning of the terms that we use, even though as producers some of us may be less prone to indulge in words than in the materials and mediums of art. Otherwise, we could scarcely hope to be understood by the educator or by any one else. There is ut-

most need especially to define both clearly and concisely those common art terms which are used most frequently, and which are often used loosely or even incorrectly by the teacher and the artist alike. The list of these terms includes art, art appreciation, art education, commercial art, fine art, handicrafts, industrial art and industrial arts. An attempt to define them is made in the paragraphs that follow. It is intended also that the definitions, all taken together, shall constitute a sort of composite definition of art education, especially in its relation to industry, commerce and the handicrafts. In order to accomplish this we have made free use of statements and definitions that have been formulated by others.

In its original and elemental meaning, art is not difficult to define, for in this sense all that is not produced by natural cause may be art. Nature is not art. The dependence of art on nature, however, is complete. Nature is the guide to craftsmanship and dictates fitness to purpose, and it suggests color, shape and decorative pattern in its animate and inanimate forms. Art must be produced by human cause. The highest expression of ideas and ideals derived from nature has produced all that is art. In a more restricted sense the word "art" is used to refer to excellence or perfection of workmanship, as when man expresses or reveals himself perfectly through his work. Thus art assumes not only intellectual but also spiritual values.

There is conclusive evidence to show that in former times people held the opinion that there was but one kind of art. Then all craftsmen were conceded to be artists and all artists were good craftsmen. The painter was also a cabinet maker, a metal worker and an architect. Then fine art, if it had any special meaning at all, must have signified fine taste.

> Once upon a time [writes Bach] there were men in Memphis who made jeweled necklaces, decorative linen weaves and painted the tales of Pharaohs on endless walls—they were artists. Later there were men in Athens who built temples and painted vases and designed polychrome tiles—they were artists. And later again there were men in Rome who erected basilicas, worked in stucco and mosaics and wrought in metal—they, too, were artists. And still later there were men in Amiens who reared cathedrals, carved in wood and stone and ivory, and caused light to serve art in colored windows—they also were artists. And once more, there were men in Florence and Fontainebleau who set up glorious palaces and planned gardens, worked in gold and in clay; inlaid pavements and painted on canvas—they, too, were artists. No one has ever questioned their standing, the things they did, or their relation to their work—they were artists all.[1]
>
> In its widest meaning [says Spinden] art is man's expression or embodiment of his ideas of use and beauty in different modes and materials. If the emphasis is laid on use, the product is called utilitarian art; if on beauty, it is called esthetic art. But never are use and beauty entirely dissociated, for the utmost development of usefulness depends upon orderly construction, and the finest expression of beauty is necessarily organic. There are law and order in common speech, as well as in poetry; there are qualities of form which please the eye while they administer to mechanical excellence in the canoes, cooking pots and automobiles of everyday life, as there are, for instance, in marble statues of all but forgotten gods that we now regard as purely esthetic.[2]

While man strives ever to express himself through the creation of new and beautiful forms to meet the changing needs in new and different ways, may we not logically conclude that the original significance of art still applies? Should not our definition imply for the artists of our own time all that it implied for the masters of past generations, even though the means for securing results, the materials and even the organization of society have changed? Today no less than in the time of Pericles and of Leonardo may we not logically conclude that all art is both fine and industrial, or that it is not true art at all? Art must in-

[1] Bach, R. F., "Art versus Industry."
[2] Spinden, H. J., "Creating a National Art."

deed be both mental and physical, both intellectual and material, both spiritual and scientific. Otherwise, it will not meet the general life needs of our time.

Bailey says that "the purpose of art education is the development of appreciation for the beautiful and of power to produce beautiful things." He also says:

> Taste develops gradually through the making of choices with reference to some ideal. Skill develops slowly through doing things with reference to some standard of excellence. In art education, therefore, every possible opportunity should be given for those conditions and activities through which taste and skill may mature.[3]

In its generally accepted application to art teaching, the word "appreciation" is often used to signify understanding or enjoyment, but in a more correct sense it is used to mean *evaluation*. To appreciate an art fully an individual should be acquainted with its source and evolution and with its masters. He should understand its significance, especially in our present civilization. He should be able to appraise its products and to differentiate between good and bad materials, technique and design, distinguishing the poorer from the finer grades and qualities and making correct choices. He should also be acquainted with the processes involved and with the tools or the machines used in making the materials adaptable to use. Ultimately he should be able to apply this knowledge not only in the selection of art products, but also in their combination and arrangement.

Prosser thinks that "there is a very close analogy between art for appreciation's sake and art for production's sake. Both are necessary in any conception of a well-rounded life for the race. There is also a very close analogy between art for appreciation's sake and art for production's sake on the one hand, and between general education and vocational education on the other. General education prepares us to be intelligent consumers of the goods of life. Vocational education prepares us to work well."[4]

Industry implies purposeful human effort. Its province includes the transformation of natural or raw materials into finished products, for the most part in quantity, either by tool or by machine. Some of the industries in which the esthetic element is a most important factor are ceramics, costumes, furniture, lighting fixtures, printing and textiles. Industrial art is the art made use of in industry. In it the esthetic element and the creative impulse play an important part especially in the designating of products. Quantity production is an essential consideration in the field of industrial art. The industrial arts are the arts of manufacture in which the esthetic element and the creative impulse may or may not enter into the formation of the product.

In the handicrafts a single workman is usually responsible for the entire creation of the product. The handicrafts are those productive activities in which the esthetic element and the creative impulse do enter, to a marked degree, into the formation of the product and in which quantity production is not a factor.

Commerce is concerned with the buying and selling of commodities. Commercial art is the art made use of in commerce. In it the esthetic element and the creative impulse often play an important part. Commercial art comprises the designing of various advertising forms and illustrations for newspapers, magazines, circulars, car cards and other posters. Commercial art also includes the planning of advertising publications, the arrangement of typed matter and illustrations on the page, the arrangement of pages in reference to one another, and the choice of materials used.

[3] Bailey, H. T., "Art Education," Houghton-Mifflin Co., 1914.

[4] Prosser, C. A., essay on "The Place of Art in Industry."

Commercial art is closely allied to industrial art.[5]

Instruction in art should not be confined to the art subjects taught in the general and the vocational schools by special art teachers, but it should also form a part of the courses in most school subjects. This applies with special force to the social, industrial, commercial and household studies. Try as we may to provide one subject in the elementary school course that will entirely take care of art instruction we shall not succeed; to be taught effectively art must be included in history, geography, language and arithmetic. There must be created within the school a genuine art atmosphere. Whereas correlation in the elementary school can be carried on most effectively through establishing contacts between the subjects, in the secondary school, correlation is with subject-matter from the fields represented by subjects rather than with the subjects themselves. Consequently, the high school art course must relate to the fields, rather than the subjects, of history, science, mathematics and the languages. The reason for this distinction is clear; the elementary school course is unified, while the secondary school course is differentiated. The results to be obtained from correlating art with the subject-matter of other important fields of human experience should in no respect be less satisfactory than those to be realized through correlating art directly with other subjects.

Were it not that definitions serve to guide our actions any attempt to formulate them would be futile. Definitions are indeed of little value unless they are to be reflected in practice. The fullest measure of artistic expression will be possible only when the fundamental principles of design are thoroughly taught and understood.

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[5] Winslow, L. L., "Organization and Teaching of Art," Warwick and York, 1925.

EDUCATIONAL EVENTS

ENROLLMENT IN FRENCH UNIVERSITIES

ACCORDING to statistics published recently by the French Ministry of Public Education, there were 52,960 students regularly enrolled in the seventeen French universities on July 31, 1925. The figures for 1923 showed 50,367 students in residence.

The number of French men students was slightly less in 1925 than in 1923. There was a striking increase in the number of foreign students, which jumped from 5,868 in 1923 to 8,790 in 1925. The number of women students of French nationality is progressing steadily.

The enrollments were as follows:

1923: French students, men, 36,941; women, 7,558. Foreign students, men, 4,645; women, 1,223.

1925: French students, men, 35,715; women, 8,456. Foreign students, men, 6,894; women, 1,896.

The University of Paris comes first with 22,521 students, the leading provincial universities being those of Lyons 3,476, Toulouse 2,819, Bordeaux 2,790, Strasbourg 2,729, Grenoble 2,347, Montpellier 2,230 and Lille 2,149. The University of Besançon closes the ranks with 395 students.

French and foreign students in French universities were distributed as follows among various schools and departments: Faculties of law, 16,517; sciences, 11,272; letters, 10,299; medicine, 6,551; medicine and pharmacy, 4,260; pharmacy, 1,480; Catholic theology, 199; Protestant theology, 72; Preparatory schools of medicine and pharmacy, 2,380.

It should be pointed out that the above figures apply only to university students properly so called; they do not cover the enrolment at the Collège de France, the Pasteur Institute, the Museum of Natural History, the National Conservatory of Arts and Crafts or at other French institutions of higher learning such as state schools of engineering, agriculture and forestry, institutes of technology, business colleges, art schools, conservatories of music, etc.

PROGRESS AT THE UNIVERSITY OF DACCA, INDIA

SIR PHILIP HARTOG has returned to England after completing his five years' tenure as the first vice-chancellor of the University of Dacca,

in Bengal. He returns, according to *The Times Educational Supplement*, with "a record of achievement which can not fail to have a great formative influence on the future of education in India."

Ten specific tasks in the way of educational reform in India were set forth by Sir Philip Hartog at the first meeting of the University Court at Dacca in August, 1921, based upon the report of the Sadler Commission. Despite unfavorable financial and political conditions in Bengal, most of these have been achieved. In accomplishing this program, duplication was avoided with the work of the University of Calcutta, and there was marked cordiality in the official relations between the two universities.

There is, it is said, "every justification for the claim that Dacca is leading the way in transforming the old mechanical system of learning by rote, condemned by the Calcutta University Commission, into something more stimulating, more reasonable and more fruitful in the development of individual capacities and thinking power." This has been largely accomplished by setting up a residential organization, based somewhat on the plan of the Oxford and Cambridge colleges, and a university union which have formed, as Sir Philip Hartog states, "the real schools for character training and citizenship." He adds that "a remarkable effect of such training has been the self-denying enthusiasm of the students for social service."

On the teaching side the most important new element is the tutorial work under which the students receive individual training in addition to the formal lectures, and also practical work in the laboratories, supervised by the teachers. In the Dacca Teachers' Training College important steps have been taken toward improvement in the teaching of English in the schools of Bengal.

In 1918 only nine per cent. of the college students in Bengal were Mahomedans, although 25,000,000 of the 46,000,000 people of the province are Mahomedans. "The demand for trained Mahomedans of the first rank far exceeds the supply in Bengal." One of the major aims of providing a university at Dacca was to increase the earlier percentage. In the past five years the University of Dacca "has already done something to reduce the balance, and will do more."

A CONFERENCE ON PLANS FOR WESTERN RESERVE ACADEMY

A GROUP of educators in various parts of the country have been invited by the trustees of Western Reserve Academy to meet at the academy at Hudson, Ohio, this month for a conference on plans for the future of the school. It is expected that Dr. Frank E. Spaulding, dean of the Graduate School of Education at Yale University, will preside at the conference.

As has been reported in SCHOOL AND SOCIETY, the trustees of Western Reserve Academy have announced the establishment of the James W. Ellsworth Foundation, which will utilize, for educational purposes, property and funds amounting to more than $4,000,000, given by the late James W. Ellsworth, a native of Hudson who made a fortune in the coal business. Prior to his death in 1925, Mr. Ellsworth for many years devoted time and energy to the encouragement of art, civic improvement and educational activities.

As expressed in a letter from Mr. A. A. Augustus, of the executive committee of the academy, to Headmaster Ralph E. Boothby, the final wishes of Mr. Ellsworth in connection with the academy were as follows:

> That the academy should be the best school of its kind in the country, that the instructors should be of the very highest type and that the surroundings should be as good as a sensible administration could provide, so that the boys would be healthy and clean and provided with equipment, grounds and buildings in keeping with the best traditions and such as would add, in simple attractiveness, to the picture as a whole;
>
> That the cost should be kept at a low figure so that good boys from families of modest means would be able to acquire an education in the line that would be the most useful to them individually. . . .
>
> That the tuition should, therefore, always be fair and only boys who are anxious to learn, progress and develop their talents be admitted. . . .
>
> That the institution shall always be non-sectarian and without religious preference, but, at the same time, provide a good spiritual influence and that regular attendance at chapel and church be required. . . .
>
> That the enrollment shall be limited to 500 boys, and possibly, at the proper time, a junior department of not to exceed 200 younger boys be established;
>
> That the student body shall never become so

large that it becomes impossible to observe each boy individually and properly direct his studies, his health and his development along the lines for which he is best fitted;

That in cases of boys, anxious to learn and improve themselves, and whose parents are unable to provide for them, a suitable allowance may be made, after proper investigation, these boys to render some service to the academy in such manner as the management shall direct, but in no case shall the academy be imposed upon by boys whose families are able to pay the modest tuition that shall be charged.

In a statement to the educators invited to attend the conference at Hudson, Headmaster Boothby says:

The decision to adopt the foundation plan is fortunate because it definitely commits Western Reserve Academy to a policy of broad educational usefulness. Students who actually come under its immediate influence will benefit by the ideal of its larger service. In addition, the time has come in American progress when the number of things to be learned and the number of people who want education at the higher levels has so increased that old systems and methods no longer suffice. There is great need, in secondary education, especially, for schools adequately equipped and endowed which may serve as laboratories for seeking new light in our already complicated problems. Through such institutions the admirable educational research activities of our public schools may be supplemented.

The opportunity for seeking the truth, free from problems of economic strain or political influence, guaranteed to Western Reserve Academy through the James W. Ellsworth Foundation, and its opportunity to comprehend through its twenty-four-hour school day the total factors that influence the growth and education of youth, provide an unusual opportunity and challenge for its future.

THE CONWELL FOUNDATION FOR TEMPLE UNIVERSITY

PLANS for a fund to be known as the Russell H. Conwell Foundation for Temple University were announced by President Charles E. Beury at a dinner last week at the Bellevue-Stratford Hotel, which was attended by more than 600 men and women prominent in the business, professional and educational life of Philadelphia. It is proposed to raise the sum of $20,000,000 over a period of fifteen years.

An urgent need, President Beury declared, is for a "modern and tall structure, costing from $5,000,000 to $8,000,000, to be erected on the present site of the converted buildings on North Broad Street between Conwell Hall and the Temple."

In addition to the great structure, which will be designed to house chiefly the college of liberal arts and sciences, teachers' colleges and the schools of commerce and theology, there is grave need for dormitory facilities.

We need modern dormitories for the young men and women. We need facilities for housing our faculty. It will require $20,000,000 to do the things that a university the size of Temple University requires.

Just as urgent are suitable buildings for our other schools, particularly medicine, dentistry, pharmacy and law. It is impossible at the present time to announce the objective in dollars, but our work must compass not only the city but the state and the nation. We must consecrate ourselves to the accomplishment of these needs. In any case our first objective must be building, which must be our first concrete purpose in carrying out the aims of Dr. Conwell.

ADMISSION TO HARVARD COLLEGE

THE routine annual cicular notice about admission to Harvard College was sent out to preparatory schools by the committee on admission at the college some weeks ago. It contained normal developments, entailing slight changes in the rules for limitation of the freshman class adopted two years ago at Harvard.

The old rules, adopted because of physical necessity, stated that 1,000 new freshmen might be admitted each year, thus allowing the freshman class as a whole to exceed that number. Now, by including in the quota of 1,000 all dropped or readmitted men—who have proven more numerous than was anticipated—the first year class will actually not exceed 1,000, which was the original intention.

Naturally with more than 1,000 men applying for admission each year, a selection must be made not only among new men but among those applying for readmission or for admission to the freshman class by transfer. The notice to schools states some of the means adopted by the committee on admission to help

it in making such choice among men scattered all over the country.

The photographs of candidates, asked for in the letter accompanying the circular, are to be used by the college records office after the admission of the candidates so that they may become known by sight more rapidly. This is a difficult matter with a new group each year of almost a thousand men. Such recognition helps make the relations with the college office more personal and informal.

Perhaps most important is the change, to go into effect in 1927, which makes the rule concerning admission without examination of candidates from the first seventh of their school class discretionary with the committee. The change says that in 1927 and thereafter "admission without examination will be restricted to schools which do not ordinarily prepare their pupils for the examinations of the College Entrance Examination Board, to high schools located in smaller cities, in rural districts, and at points remote from Cambridge. The larger endowed academies, private preparatory schools and large city high schools in New England and elsewhere which for many years have been accustomed to preparing their students for college board examinations, should present candidates after 1926 by examination only. In the case of students from all other institutions, each particular application will be decided by the committee in the light of all the evidence in hand."

NORMAL SCHOOL PERSONNEL IN CONNECTICUT

STATISTICS reflecting the predominance of industry in Connecticut and the foreign-born element in the state's population are represented in recent studies of the four Connecticut normal schools, summarized in the monthly bulletin of the State Board of Education.

It is shown

a. That 53 per cent. of the students came from homes in which either one or both parents were born in foreign countries.
b. That in only 28 per cent. of the cases were both parents natives of Connecticut.
c. That 57 per cent. of the normal school students come from cities of over 25,000 population.
d. That the parents of 74 per cent. of the students were engaged in mechanical, manufacturing or mercantile occupations.

As to the personnel of the normal-school faculties it was disclosed that 40 per cent. of the instructors were graduates of Connecticut high schools; 60 per cent. were normal school graduates, and 48 per cent. held college degrees. A study of normal school salaries showed that normal school instructors in many instances were being paid lower salaries than were high school teachers in Connecticut. In the high schools of Hartford, New Britain and Bridgeport alone 94 teachers were earning higher salaries than the median salary paid normal school instructors for the same year. This study also showed that model or critic teachers in normal schools were in many instances being paid no more than elementary school teachers in many cities. The median salary paid model teachers was almost identical with that paid to elementary teachers in Bridgeport, New Britain, Greenwich and other cities.

The studies presented general information showing that 80 per cent. of the elementary school teachers of the state had either had normal school, college or special post-secondary school training for their work; that 96 per cent. of the high school teachers of the state had had special training for their work, and that 77 per cent. were graduates of four-year college courses.

PLACE AND FUNCTION OF ENGLISH IN AMERICAN LIFE

BASING their conclusions upon replies from 2,615 persons in 253 different occupations, the Committee on Place and Function of English in American Life has reported to the National Council of Teachers of English that schools might well devote more attention to oral language instruction. The language activities most widely used by the persons replying are particularized by the committee in its recommendations as follows:

"Interviews: word of mouth inquiries; reports to a superior; instructions for subordinates; conferences. Conversation: with casual acquaintances; at social gatherings; over the telephone. Public speaking: informal discussion; preparing addresses. Writing: informal notes and memos for one's self; formal notes of

invitation, introduction, etc. Reading: legal documents. Listening: to an interview, a conference or a public meeting."

This specific study of "the demands actually made upon the adult American to-day with respect to his use of language" was undertaken as being a necessary "preliminary to any satisfactory investigation of the teaching of English." The committee now urges the National Council of Teachers of English to "further investigation, both broad and intensive, of what the schools are doing in the teaching of English —or rather in the teaching of the communication and interpretation of thought by means of language. Such investigation would study aims, curricula, methods and classroom conditions, as regards their adequacy for enabling the men and women of the future to meet better the language demands laid upon them." A series of coordinated investigations, carried through a period of years, is recommended.

The report of the committee gives tables showing the geographical distribution and occupational groupings of the men and women who answered the questionnaire submitted. Most of the replies came from the eastern and middle western states. Of the 2,615 replies tabulated, 794 were persons in the professions, including 67 in the ministry, 384 in education, 99 in engineering and technical work, 47 in journalism, 88 in law and 109 in medicine. Business and industry were represented by 1,278 men and women. There were 481 replies from workers in farming, mining, manufacturing, 255 in transportation and 246 in management. The largest element in the miscellaneous group were 325 housewives.

John M. Clapp was chairman of the committee, and the other members were Rewey Belle Inglis, Edwin L. Miller, Charles S. Pendleton and Mary Doane Spaulding. Copies of the report may be obtained, upon publication in the near future, from the secretary of the National Council of Teachers of English, 506 West 69th Street, Chicago.

THE MEETING OF THE SENATE OF CHEMICAL EDUCATION

THE newly organized Senate of Chemical Education, formed under the direction of the American Chemical Society, will meet at Tulsa, Oklahoma, next week in connection with the sessions of the society's Division of Chemical Education. Each state of the union will be represented by three senators.

As announced by the chairman, Professor Neil E. Gordon, of the University of Maryland, the senate will discuss radical changes in the teaching of high-school and college chemistry, proposed as a result of a questionnaire sent throughout the United States.

Demands of chemical education in this country, the questionnaire revealed, include greater public instruction in the value of chemistry, more stress on the human side of the science, better trained teachers, correlation of high school and college courses, and a new type of research.

This research, it is stated, would have to do with "the sorting of the literature and correlating the new ideas in order that they may be understood and appreciated by the teachers of chemistry in high school, college and university work." Four years of graduate work for the teacher instead of three are suggested to meet the needs of broader education. The number of students which a school must have to warrant the teaching of chemistry will also come up. Chemistry, it is held, should be one of the required sciences in a four-year science course in every high school. "The scientific age has come upon us so rapidly that school authorities have not sensed its presence. Science to-day is the very cornerstone of our civilization, and four years of high school science is a national need. Some progressive states are already advancing this plan.

Dr. Gordon believes that the average graduate course in the universities does not properly equip men for the teaching of chemistry, and that "the higher you go in the educational ranks the less education is practised." This situation, he said, is too vital to the nation to be longer ignored.

A SURVEY OF RESEARCH IN THE HUMANISTIC SCIENCES

AIDED by a subvention from the Carnegie Corporation, the American Council of Learned Societies is undertaking a systematic survey of research in the United States in the humanistic and social sciences. The object is to obtain a

more adequate picture than can be had at present of the quantity, variety, tendencies and general conditions of research in these fields, including aid to and facilities for both research itself and the publication of its products. It is believed that the results of the survey (which will be put into print as soon as practicable) will serve the interests of scholarship in many ways, among them by contributing something to the more adequate appreciation and support of research in fields which at present are in danger of being cultivated less assiduously than the domains of natural science.

Inquiries are being made by Director Frederic A. Ogg into the research facilities and activities of national and local societies, academies, foundations, institutes, bureaus and other organized or institutional agencies (including, for colleges and universities, the facilities for research, but not the work being done by individual faculty members). Director Ogg states that, obviously, however, any approach to completeness of data requires that personal reports be obtained from individual scholars, and accordingly an appeal for information is being sent to substantially all members of the twelve constituent societies of the American Council of Learned Societies and to some other groups besides. He adds that it is highly important that a carefully and reasonably full reply be made—and *at an early date*—by all who consider themselves to be, or likely soon to be, engaged in research of any kind in any humanistic or social field. Personal activities pertaining to the encouragement or direction of research, or editing or publishing the products of research, should, of course, be included. Replies should be addressed to Director Frederic A. Ogg, 1133 Woodward Building, Washington, D. C.

EDUCATIONAL NOTES AND NEWS

THE degree of doctor of laws was conferred on Dr. Michael I. Pupin, professor of electromechanics at Columbia University, and on Dr. John H. Muirhead, the British philosopher, at the recent charter-day exercises at the University of California.

DR. FRANK W. BALLOU, superintendent of the schools of Washington, D. C., who after his work in connection with the recent meeting of the Department of Superintendence of the National Education Association, of which he was president, was voted by the school committee leave of absence "on account of the signal service that he had rendered to the community during the current school year," has returned to Washington after a ten-day visit to Florida.

STUDENTS of Dean James A. Beebe, of the Boston University School of Theology, presented him with a gold watch after he had made his farewell address. Dr. Beebe is leaving Boston University to take up his work as president of Alleghany College, Meadville, Pa.

AT a luncheon in celebration of the fiftieth anniversary of his connection with the schools of New York, Mr. William A. Boylan, superintendent in the Bronx, was presented with a gold watch, the gift of Mayor Walker, who was a former pupil of Mr. Boylan. Addresses were made by the Reverend William J. Duane, S. J., president of Fordham University, a former classmate of Mr. Boylan's in St. Francis Xavier High School; State Industrial Commissioner James A. Hamilton, Dr. Edward W. Stitt, associate superintendent of schools; Surrogate John P. O'Brien, of the Bronx, and William J. Weber, commissioner of the board of education. Edward F. McSorley, principal of Public School 32, was the toastmaster.

A NOTICE from the University of Mexico reads as follows: "The Secretary of Public Instruction, the Rector of the National University of Mexico and the Director of the Summer School take pleasure in announcing that the internationally distinguished Dr. John Dewey, professor of philosophy at Columbia University, has accepted an invitation to join the Summer School staff of the National University."

SIR ALFRED HOPKINSON, formerly principal of Owen's College and vice-chancellor of the University of Manchester, as the result of the polling in a by-election to fill the vacancy in the representation of the combined English universities caused by the resignation of Mr. H. A. L. Fisher, formerly British Minister of Education, received 2,343 votes, while Mr. Ramsay Muir (Liberal) received 2,000 votes, resulting in a Conservative majority for Mr. Hopkinson of 343.

PROFESSOR GILBERT NORWOOD, professor of Greek at the University College, Cardiff, has

accepted a call to the chair of Latin at the University of Toronto.

PROFESSOR SEVERI has resigned from the rectorship of the University of Rome, Professor Giorgio Del Vecchio having been chosen as his successor.

SENATOR AGOSTINO BERENINI, who for many years has been rector of the University of Parma, has resigned and has been succeeded by Professor Camillo Callenga.

PROFESSOR CHARLES M. ANDREWS, Farnam professor of American history at Yale University, and Leonard W. Labaree, instructor in history, will represent the university at the second Anglo-American Conference of Professors and Teachers of History at the University of London in July.

ROLAND B. WOODWARD, of Rochester, N. Y., has been reelected by the legislature for a term of twelve years as a member of the board of regents of the University of the State of New York. He was first elected a regent last year to complete the term of the late Chancellor Emeritus Pliny T. Sexton.

LUTHER C. GREENLEAF, architect and president of the Massachusetts Real Estate Exchange, Francis E. Slattery and Joseph T. Morton have been appointed members of the Schoolhouse Commission of Boston. This committee will have charge of the program, which has now been prepared, of construction for the public schools and calls for the expenditure of $5,000,000.

E. CHRISTY, director of the industrial arts department of the Cincinnati schools, was elected president of the Western Arts Association at its meeting in Des Moines, Iowa, on March 20.

J. H. MCNEAL, superintendent of schools of Beloit, has been elected president of the Southern Wisconsin Teachers Association. He succeeds V. G. Barnes, of Madison.

CARL D. SMITH, dean of the School of Commerce and Finance at Northeastern University, has been elected chairman of the commission on education of the National Association of Purchasing Agents.

SUPERINTENDENT F. M. SHELTON, of Springfield, Ohio, has been elected a director of the Chamber of Commerce of that city.

THE REVEREND H. H. SCHAFFER, of Charleston, S. C., has accepted the presidency of Lenoir-Rhyne College, at Hickory, N. C., to succeed Dr. J. C. Peery, who recently resigned to accept a pastorate at Charleston.

REV. G. GARDNER MONKS has been elected headmaster of the Lenox School for Boys, recently established under the auspices of the Protestant Episcopal Church of the Province of New England.

WILLARD P. TOMLINSON, headmaster of the Swarthmore Preparatory School since 1921, will retire from the school in June and will be succeeded by Edward R. Robbins, who for four years has been superintendent of the Jenkintown, Pa., public schools. He was earlier a teacher at the Lawrenceville School and William Penn Charter School. Frederick H. Somerville will continue as associate headmaster at Swarthmore.

STEPHEN P. CABOT has resigned as headmaster of St. George's School, Middletown, R. I., after being associated with the school for twenty-five years. He has been headmaster since 1917. A native of Brookline, Mass., Mr. Cabot was graduated at Harvard in 1892.

PAUL M. VINCENT, superintendent of the city schools of Stevens Point, Wis., for the past three years, has been elected for his fourth term, with an increase in salary.

MRS. CLARA GINTY has been appointed to the newly created position of assistant superintendent of schools at Madison, Wis. She was formerly principal of the Franklin school at Madison.

DAVID GIBBS has resigned as superintendent of schools of Meriden, Conn.

FRANKLIN H. MCNUTT is the new head of the department of education at Wittenberg College.

DR. MARJORIE H. NICOLSON, assistant professor of English at Goucher College, has accepted a position in the English department at Smith College, Northampton, Mass.

DR. CHARLES H. JUDD, director of the school of education of the University of Chicago, will give the address at the sixty-second annual com-

mencement of the Teachers College at Emporia, Kansas.

DR. WILLIAM MATHER LEWIS, president of George Washington University, gave an address before the Danville conference of the Virginia Educational Association, East District, of which Mr. Renley J. Clark was president.

DR. A. B. MEREDITH, commissioner of education for Connecticut, recently addressed the Maryland Congress of Parents and Teachers at Baltimore in joint meeting with the Educational Society.

PROFESSOR JOHN R. COMMONS, of the University of Wisconsin, will give a course on the Legal and Economic Foundations of Capitalism at the summer session of the Yale Law School.

THE program of dedication for the new theology building at the University of Chicago on April 5 will include addresses by President J. G. K. McClure, of the McCormick Theological Seminary; President Ozra S. Davis, of the Chicago Theological Seminary; Professor Gustav Krueger, of the University of Giessen; Professor T. R. Glover, of St. John's College, University of Cambridge; President Allan Hoben, of Kalamazoo College, Michigan, and Dean Shailer Mathews, of the University of Chicago Divinity School.

SPEAKERS at the sixth annual meeting of the Ohio State Educational Conference on April 8, 9 and 10, include: Lewis M. Terman, Leland Stanford University; William C. Bagley, Columbia University; Henry Suzzallo, University of Washington; E. N. MacCracken, Vassar College; V. A. C. Henmon, University of Wisconsin; Edwin D. Starbuck, University of Washington; G. C. Fisk, University of Wisconsin; Raleigh Shorling, University of Michigan; J. F. Hosic, Columbia University; Miss Mary M. Mathews, Purdue University; H. H. Young, Indiana University; P. W. Dykema, Columbia University; J. B. Edmondson, University of Michigan; J. F. Williams, Columbia University; William Downing, Chicago University; Herbert S. Weet, Rochester, New York; H. G. Gale, Chicago University; Edward Rynearson, Pittsburgh, Pennsylvania; Claude Bragdon, Rochester, New York.

THE new school at Riverhead, N. Y., erected at a cost of $250,000, was dedicated on March 1. At the exercises a tablet was unveiled in memory of the late Charles H. Howell, who served as teacher and principal of the school and later as school commissioner and superintendent of schools in Suffolk County.

EXERCISES commemorating the anniversary of the birth of the late St. Clair McKelway, at the time of his death the editor of the Brooklyn *Daily Eagle*, were held at the St. Clair McKelway Junior High School last week by the principal and teachers and pupils of the ninth year classes. Mrs. McKelway, the widow of the editor, and George Currie, literary critic of the *Eagle*, were the guests of honor.

DR. ALBION W. SMALL, since 1892 head of the department of sociology at the University of Chicago, formerly president of Colby College, died suddenly on March 24, aged seventy-two years.

DR. JOHN A. KEEN, formerly a member of the faculty of Vanderbilt University and at one time president of Randolph-Macon College, died on March 24, at the age of seventy-nine years.

EVERETT O'NEILL, for twenty-four years an examiner in the New York State Department of Education, and for nearly fifty years connected with the school system of the state, died in Albany, on February 28.

DR. JACOB SCHWARTZ, well known as a librarian until his retirement a few years ago, died on March 26, aged eighty years.

THE New York City Municipal Civil Service Commission will receive applications of candidates for membership on the board of examiners, Department of Education, from March 30 to April 20. The dates of the tests will be announced later. There is one vacancy on this board, whose members are paid a salary of $7,700 a year. The vacancy was caused by the death a few weeks ago of Dr. James C. Byrnes, who had been a member of the board for more than two decades. The last examination for the position was given in 1920. At that time more than one hundred applied for the series of tests, which resulted in the promulgation of an eligible list of but twelve men and women. Four of these were immediately ap-

pointed examiners—William A. Hannig, Joseph K. Van Denburg, Louis Marks and Joseph M. Sheehan. A few months ago Henry Levy was appointed from the list to succeed Mr. Sheehan, following the latter's promotion to the board of superintendents. The remainder of the list "died" in November, as it was valid for four years only.

RECEIPT of applications for statistician to fill a vacancy in the position of director of the statistical division of the children's bureau of the Department of Labor, and vacancies occurring in positions requiring similar qualifications, will close on April 20. The entrance salary is $3,800 a year.

AN Associated Press dispatch from Denver on March 25 reported the declaration of members of the student council of the University of Denver that the dismissal of Professor Grove Dow came because he used students to gather data for a recreational survey. Chancellor Heber H. Harper, of the university, has declined to comment on Professor Dow's dismissal. Nine men and girl students, members of Professor Dow's class, aided in the sociological survey by personal investigation and attendance at road houses, pool rooms, theaters and dance halls in and around Denver. Students are circulating petitions on the campus and among alumni demanding that Professor Dow be reinstated.

ACCORDING to an Associated Press dispatch from Baton Rouge, authorities of Louisiana State University have refused to permit a course on evolution to be given at the university this year. Twenty students who had organized a "class in evolution" were notified by Professor W. H. Gates, head of the department of biology, of refusal of the university authorities to sanction it. Professor Gates stated be had it on good authority that a bill prohibiting the teaching of evolution in state schools would be introduced in the coming biennial session of the legislature, and that in view of this fact the university authorities thought it unwise to include such a course during the spring term.

STUDENTS of eight women's colleges of New England and girls representing trade unions and Y. W. C. A. groups of ten New England towns and cities met at Smith College on March 20 and 21 for a conference. On March 20, Eleanor Coyt, national industrial secretary of the Y. W. C. A., was the speaker at a banquet and Professor Muzzey, of the department of economics at Wellesley College, spoke afterward on "The Common Interests of Students and Industrial Girls." There were group discussions on March 21. Girls from the following places comprised the industrial group: Pawtucket, R. I.; Woonsocket, R. I.; New Bedford, Brockton, Boston; Hartford and New Britain, Conn.; Holyoke, Springfield and Florence. The following colleges were represented: Brown, Wheaton, Simmons, Wellesley, Radcliffe, Mt. Holyoke, Springfield, International College and Smith.

DR. AUGUSTUS O. THOMAS, state commissioner of education and president of the World Federation of Education Associations, has received an invitation to hold the biennial session of the federation in the summer of 1927 at Peking, China. The invitation was received from P. Ling, of the National Society for the Promotion of Education. Mr. Ling was one of the delegates from China to the last meeting of the federation, held at Edinburgh, Scotland. The ministers of foreign affairs and education in China also joined in sending the invitation, and the government of China is being asked for an appropriation to cover the necessary expenses. The federation has been offered the freedom of the palace if the meeting is held at Peking. It was announced a short time ago that the convention of the federation in 1927 would be held either at Toronto, Canada or at Honolulu, Hawaii, the choice between these two cities to be made in the near future. Invitations have also been received from Geneva, Switzerland, and from Brussels, Belgium.

A PRELIMINARY program has been issued of the third Congress of the Universities of the Empire, to be held on July 12–16 at Cambridge. The chairman for the morning session of July 13 will be the Earl of Balfour, and the subject of discussion "The State and the University." The afternoon session will be devoted to considering the desirability of establishing in London a school of advanced legal studies (chairman, Viscount Cave). Cooperation in research throughout the Empire will form the subject of the morning session of July 14,

under the chairmanship of the Marquess of Londonderry. The morning session of July 15, under the chairmanship of Sir Matthew Nathan, will be given to a consideration of the mutual recognition of examinations and related topics, while the afternoon session, under the chairmanship of the Duke of Devonshire, will be devoted to the subject of the physical welfare and training of students and the organization of athletics. At the morning session of July 16, under the chairmanship of the Viscount Cecil of Chelwood, the actual working of the Ph.D. scheme will be discussed, while the afternoon session (chairman, the Viscount Haldane of Cloan) will be occupied with a consideration of the desirability of articulating other pension schemes with the Federated Superannuation System of Great Britain and Ireland.

MR. WILLIAM RANDOLPH HEARST has given $1,000,000 to the University of California as a memorial to his mother, Mrs. Phoebe Hearst.

RESIDENTS and members of the summer colony of Bennington, Vt., have pledged $635,000 toward the founding of a new woman's college at Old Bennington, according to announcement by the Reverend Vincent Ravi-Booth, secretary of the college and pastor of the Old First Church. In his statement the pastor said the canvass was begun with instructions from the trustees that no announcement of its progress would be made until the half-million mark in subscriptions had been reached. The secretary also stated that Miss Myra Kelly, headmistress of the Bryn Mawr School, Baltimore, had been engaged to make a year's investigation of American colleges and from her observations to draw up a tentative curriculum for the Bennington College.

THE first week of campaigning for the new million dollar Ethical High School, which is shortly to be built in New York City, has brought the total contributions up to nearly $400,000. A letter from Governor Smith endorses the new school as a civic project calculated to benefit both the public and private schools of the city as well as the students who may attend. Governor Smith particularly emphasized in his letter the fact that the public school system necessarily depended upon the pioneer work and experimentation of schools of this type to lead the way toward educational advances.

THE London education rate for 1926–27 will be 2s. 2¼d. in the £, a decrease of 2d. as compared with 1925–26, according to present estimates of the London Education Committee, as reported by *The Times Educational Supplement*. Final action will not be taken by the London County Council before May 18.

A THOUSAND German university students have arrived in Vienna to attend a congress convened by students of the Pan-German Party at Austrian colleges. The visitors were welcomed by the Austrian Vice-Chancellor, himself a Pan-German, and by other prominent politicians. A discussion of the general tactics during university life likely to be useful in the movement to realize Austro-German union is said to be the principal item in the program.

TWO authoritative inquiries recently have been inaugurated in Great Britain for the purpose of investigating the relationships between education and industry. The inquiries are to be conducted by two committees (one for England and the other for Scotland) appointed by the government. According to the *Christian Science Monitor*, both committees are requested to inquire into and advise upon the public system of education in relation to the requirements of trade and industry. Special reference is made to the adequacy of the arrangements for enabling young persons to obtain suitable employment. The personnel of the two committees was objected to by teachers' organizations on the ground that it is one-sided. No teachers have been included on either committee, the members of each being composed almost wholly of prominent business men and women, together with trade union leaders. But the president of the Board of Education justified the composition of the committees on the ground that it would be wise of teachers and the Board of Education as well, to stand out from such a committee and allow it to look into the whole question in its own way.

OFFICIAL statistics of Prussian universities and technical colleges for the summer semester of 1925, as quoted in *Nature*, show a total of 39,134 matriculated students, including 3,234 students from other countries. To these figures

may be added the numbers of students in commercial, agricultural and veterinary colleges, which bring the total up to 42,744, including 3,607 from other countries. Of these students from abroad, 1,232 were German as regards their mother-tongue, and more than half of them (2,110) were enrolled in the University of Berlin (1,042) and the Berlin Technische Hochschule (795), Handels-Hochschule (169), Landwirtschaftliche Hochschule (82) and Tierärztliche Hochschule (22). Bulgarian (246), Russian (191), Norwegian (108), and Chinese (101) students were specially numerous in the universities; Bulgarian (158), Russian (140), and Roumanian (134) in the technical colleges. English students in the University of Berlin numbered 10. None of these figures include "Hörer" or unmatriculated students. The University of Berlin provides through its Deutsche Institut für Ausländer a continuous series of courses in German language, literature and institutions, each lasting two months. The thirty-eighth of the series (December 1925–January 1926) was attended by 130 students belonging to thirty-two nationalities and including 40 Russians, 17 Japanese and Koreans, 12 Chinese and 6 Jugoslavs.

THE second Anglo-American Conference of Professors and Teachers of History will be held at the University of London during the week of July 12. The purpose of the conference is "to afford professors and teachers of history in the universities of the British Empire and the United States opportunity to discuss with their colleagues in the University of London and other universities of the United Kingdom problems of historical research which are of interest to the English-speaking world." The first conference of the kind was called by the senate of the University of London in July, 1921.

THE first girls' agricultural school in Palestine will be opened on April 8, by Lady Samuel, wife of the former high commissioner. The school was established by the International Women's Zionist organization at Nahalal.

DR. FREDERICK W. MEMMOTT, a graduate of Williams College and for twenty-three years a teacher in the New York City schools, died on March 16. Since 1924 he had been principal of Public School 148, Brooklyn. He had served as secretary and president of the New York Schoolmasters' Club and was active in the New York Society for the Experimental Study of Education.

SPECIAL CORRESPONDENCE

NOTES ON EDUCATION IN JAPAN

THE most recent development in educational affairs in Japan is the trend toward the direct method in English teaching. Formerly there were no standards for judging proficiency. The few American and English teachers of English had been each using his own method and material with little measuring or comparing of results. The Japanese teachers of English were quite handicapped in teaching conversation and pronunciation and generally used a literal translation method.

In the spring of 1923 the Imperial Department of Education engaged Mr. Harold E. Palmer, an experienced teacher of English to French students, to advise as to methods of teaching English to Japanese. Mr. Palmer's theory is that one can not read even silently without unconsciously mentally forming the sounds of the words; therefore the teaching of correct pronunciation is most desirable. Mr. Palmer advocates the use of the international phonetic signs, and many dictionaries and series of readers have been prepared recently on a phonetic basis. Knowing that many Japanese teachers of English are not able to plan a course for using the direct oral method, Mr. Palmer with several assistants has compiled much material for practical use in the classroom, especially designed to train pupils to think in English.

The Institute for Research in English Teaching, of which Mr. Palmer is the leader, is protesting against the sort of entrance examination questions in English usually doled out every year. In adopting the slogan "plain English first" the institute may really do a great favor to the long-suffering middle-school students.

The entrance examination situation for graduates of middle schools who wish to enter Koto Gakko (schools of junior college grade) gets worse instead of better, because schools can not be established in the ratio that the applicants are increasing. It is reported that the most popular Koto Gakko the First in Tokyo has

ten times as many applicants as can be admitted. The most popular commercial college, which is located in Kobe, has the same proportion. Most of the schools of that grade, even those in small places, have five times as many applicants as can be admitted. For most schools English and mathematics are the determining points of the entrance examinations.

A new independence of thought is evident in the Association of Middle-school Principals. At a recent meeting they discussed the advisability of equalizing the educational standards of the schools for boys and for girls of the same ages. Also the desirability of an elective system for girls' high schools was discussed. The principals favor the American system, with some changes. At present every girl in high school carries each year approximately thirty-one periods of forty or fifty-five minutes per week with fourteen or so different subjects. It is to be hoped that some system of electives can be adopted soon.

ALMA G. EATON

KANAZAWA, JAPAN

DISCUSSION

ARE PROFESSORS TEACHERS?

ARE college professors and instructors teachers? Are they expected to be? These, along with a great many other questions, have puzzled the writer as a student for many years, and it is as a student, inquiringly, that these questions seek answers.

It would appear that, for the most part, college and university professors, now appointed, have come into their positions without any very definite requirements as to their actual teaching skill. Whether one is reactionary and believes still that teachers "are born and not made," or whether we concede that modern schools of education can turn out men and women with stores of knowledge *plus* an acquired ability to impart it, is a question upon which much thought and energy can be expended. The fact remains, however, that at present our college and university instructorships and professorial chairs are filled by men and women who are not born teachers; who were never even "exposed" to pedagogical methods; and what is more amazing, perhaps, who, in many instances, have, themselves, no desire to be *teachers!*

Technically we have come to differentiate between field worker and research worker. The field of social work, fast becoming a profession, is illustrative of the point. Research work in this field is vital, stimulating and of paramount importance, yet it is not the major interest of the *case-worker*. The settlement worker, for example, must know her working principles, but especially must she hold the key that unlocks the hearts and homes of her clients. Her work is valuable only in so far as she inspires confidence, meets all people easily and well, and records accurately, though silently and unobtrusively, her investigations.

It is different, it appears, in the university. The professor may or may not be the teacher. If he is interested primarily in research, but teaches courses in his chosen field, it means that his teaching is his secondary interest; his research suffers in proportion as his energy is drained by the demands of his students. Often, too, he teaches merely as a means to the continuance of his laboratory work; our educational system, as yet, makes no general provisions for the research professor, either in definite status or income. Obviously this is deplorable. Like all statements, the former requires qualifying; for in almost every college and university there may be found now and then a man or woman who is using his or her allotted time for independent study, and whose income is provided for by outside gift or by special arrangement within a given department.

The dangers attendant upon teaching done in college by one who does not wish to teach are many and almost platitudinous in this day of awakened interest in the value of the science of teaching. Probably no spirit actually hungering for knowledge will be stifled by bad teaching at the collegiate stage, but how many young men and women entering our colleges and universities know that they are potential scholars or, for that matter, considering the recent "boom" in college attendance, that they are potential anything?

College exists, we firmly believe, to discover and develop every latent talent. Can too great skill be exercised in the handling of tender shoots?

Many instances could be cited to illustrate the point: the college professor who launches his

sophomore Chaucer class—introductory Chaucer—into the problems of Chaucerian criticism, matters of dates, chronology and literary controversy; the professor of Shakespeare, who labors with his undergraduates to interest them in the First Folio and its problems, when they have scarcely learned to appreciate the characterizations of Hamlet and Othello and are longing for freedom to revel in the rich content.

Nor are such methods to be found only in cultural courses. The writer recalls—always with amusement—a class in secondary school methods conducted by a well-known professor of education. The assignment and all its requirements was the topic of discussion, and among other points stressed was the caution against leaving too little time at the close of the period to assign the lesson of the next day. The beginning of the class hour was the preferred time, all things being equal. In the midst of the explanation the gong sounded and the class dashed to the door. Stragglers, not deafened by the sound of retreating feet, might have heard from the direction of the professor's chair, "Take Chapter IX in the text for next time."

On the other hand, the instructor who can boast—well he may boast of this in 1926—that his students "burn the midnight oil" over problems aroused in the philosophy lecture concerning the life to come; the professor of literature whose classes are thronged, literally to the doors, by students eager to learn to appreciate poetry; the professor of history whose students wrestle daily out of class hours with international problems of world peace—these are the *teachers* in our institutions of higher learning.

In other words, may it not be the too frequent practice of the college instructor using graduate methods on embryo minds, which we would condemn? A keen appreciation of mental capacities at every age and an intimate knowledge of educational psychology are essential to all good teaching, and this holds true whether in the senior year at the university or in the fourth-grade primary. One wonders whether ignorance of some of the simplest pedagogical laws, such as stimulation and endurance, may not be blamed for signal disillusionments and failures of many college students.

The research professor has his place, more important from many angles than that of the teacher. His contributions to the field of learning are invaluable. The *teacher*, time-honored, and now for the first time evolving from his traditional place as *servant* to that of *master* in his field, can not be supplanted, either by great intellectual achievement or "immaculate" text. Both are essential to the best and speediest development of our educational system, but for the purposes of the class-room, must not the *teacher*, in college, as in high school, come first?

There seems to be a tendency—increasing through commercial enterprise—to make the text-book, whether primary school or collegiate, out-teach the teacher. To be sure, the modern texts are decided improvements upon the old ones, which were practically void of any underlying psychological or pedagogical principles; but in our enthusiasm to make every bit of our recently acquired knowledge of the science of education function, we have rather forgotten, perhaps, that there is, and must always be a *teacher*. This overemphasis of educational principles in text-book writing is only the pendulum swinging to the extreme right. Teaching skill is still essential, and it is with this, rather than with the texts and their making, that we are here concerned.

As the writer returns from time to time to the secondary school where the four happy years of high-school life were spent, one question is always certain to be asked of her. "Do you find that you have learned more about the teaching art from your college instructors and courses in education than from your own high-school teachers?" Invariably, the answer has had to be, "No." For the excellence of high-school teaching bears its fruits in ways other than those of success in business or academic achievement; and not the least of these, it may be emphasized, is the abiding inspiration from exposure to sound teaching methods. It is perhaps the very consciousness of the excellence of one's high school teaching that makes one's perception of the deficiencies in college teaching so keen.

Naturally the combination of researcher and teacher is the goal, and fortunately for American colleges and learning, such men and women actually exist. To combine the rare, sympathetic and inspiring masterfulness of teacher

with genuine scholarship is, indeed, ideal. Teacher-scholar, or scholar-teacher? Ought we not to answer, "Both!"?

Helen I. Davis

Hollins College

TO LATIN VIA A ROMANCE LANGUAGE

In the issue of School and Society for January 9, Professor Doyle proposed that a thorough test be made of the theory, "To Latin via a Romance Language." He quoted Benjamin Franklin, Marshall Elliott and L. A. Wilkins as finding this method more efficient than the usual "Latin as Foundation" plan, after personal experience with both.

Mr. W. R. Price, in the issue for February 13, objects to Professor Doyle's suggestions on various grounds, with the intimation that they are pro-Spanish propaganda. To a bystander, it would seem a pity if Supervisor Price's remarks should conceal Professor Doyle's main point, which is that a method, effective in many individual cases and in other nations, has never been officially tried in the United States, and which proposes "a carefully conducted test of this theory with a large number of cases and with adequate controls extending over a period of eight or ten years."

William D. Allen

QUOTATIONS

SYNTHESIS IN EDUCATION

At the Harvard Teachers Association, the other day, President Glenn Frank, of the University of Wisconsin, proclaimed, in a witty and convincing address, the need of synthesis in education. Specialism, he asserted, has gone too far. Culture has become fragmentary. We no longer "see life steadily and see it whole," and the result may be far more serious than a mere scrappiness in modern thinking; for without general views which shall stabilize our minds and give us a basis for wise practical judgments, we shall increasingly be "prey to troubled thought" and become the dupes of isms and movements which offer specious promise of escape from our intellectual confusions. Civilization has become too complicated to be grasped and interpreted by the specialist, if not too complicated to be borne by the human frame at all; in any case, our education demands a new synthesis, especially in our colleges—something more radical and far-reaching than "orientation courses" or "summary courses," something continuous and pervasive, occupying a very large share of the student's time for at least his first two college years. President Frank sketched the problem in general and offered tentative solutions in terms of the curriculum and in terms of method. His address will doubtless be published by the association in its Proceedings and perhaps elsewhere.

The present practice in Harvard College may make some claim of approach towards the synthesis thus indicated as desirable, although there is doubtless still far to go in that direction. For breadth of view Harvard prescribes one general course in history, one in literature, one in science and one in either philosophy or mathematics. For intensiveness that shall eventuate in a sort of breadth, Harvard requires concentration on one field of thought to the extent of six courses, with a general examination at the end and tutorial instruction to give vitality to the process of specialization. These measures may be all that is needed by way of formal and external regulation. If graduation from Harvard College is to mean wide outlook, soundness of judgment and stability of mental processes, it will be because a new spirit has been infused into teaching, particularly into the tutorial instruction. It will mean that the college has secured a new vitality in learning, made teaching less authoritative and artificial, found out how to present the problems in the special fields in all the thickness of their relations and implications and discovered how to stimulate students to independent and constructive work.

There is another aspect of this matter, on which Mr. Frank did not touch and on which Harvard has made little progress. Confusion of mind and narrowness of outlook present a problem which is in part a problem of mental hygiene. Health of mind depends somewhat on the recognition of general human limitations and of our own individual limitations. It depends, also, on certain general attitudes, such as reasonable respect for expert opinion, reasonable reliance on one's own judgment, hopefulness, honesty of thought and willingness to

take certain risks in thinking and behavior without staking everything on winning. Many teachers have not learned to work with students personally enough to get at such matters, nor seriously tried to guide them in such important problems as the use of their own minds in study or the choice of their careers in life, their avocations or their political or general social attachments. The problems involved in what is commonly called "personnel research" and "personnel work in colleges" are many and the dangers great; but educational synthesis lies that way too.—*The Harvard Alumni Bulletin.*

THE WORK OF SUPERINTENDENT VAN SICKLE IN BALTIMORE

IT is not only the warm friendship of many Baltimoreans for James H. Van Sickle which makes the news of his death in Florida a matter of deep and general regret. This community owes its one-time citizen a debt of gratitude far greater than it has ever publicly recognized. Its officials expelled him from its service fifteen years ago and even now it has created no formal memorial in his honor, and yet one can not study the public school system of to-day without finding his work and his standards as essential parts of the structure.

No matter if his stern refusal to be satisfied with less than the best, his unswerving efforts to bring the teaching staff of the public schools to the highest level of competency, laid him open to the charge of autocracy and brought him under political attack. The things he strove for are now part of the unwritten constitution of the schools as every informed Baltimorean conceives it.

As far as his own position in Baltimore was concerned, he fought a losing fight and was subjected to ignominy which another city was wise enough not to take seriously. But it was he who introduced Baltimore to the idea that the public schools can not serve the city well unless they are protected from the politician. In the day of unrestrained wire-pulling and official subservience to unofficial powers he knew no recommendation for a teacher except merit, he approved no policy of administration that would lower the quality of the instruction which the city gave to its children.

Practically minded critics have often asserted that he would have achieved more if he had tried for less. The truth of this theory is to be doubted. A complaisant executive of the "good-mixer" type would have little chance against the well-intrenched political forces of a quarter of a century ago. The politicians, big and little, knew all about good mixers. What was needed, if Baltimore was to be jerked out of its rut of educational indifference, was a man of courage and faith. James H. Van Sickle had both.

The schools of to-day and the better schools which may come in the future are his memorial in this city. The memory of his work persisted through the lamentable years of maladministration which followed his dismissal, and in large part inspired the movement which began the present era of sincere and informed concern for the welfare of the schools. His courage and his faith were at last justified. What he wanted was not to direct a good, honest, efficient school system in Baltimore, but to provide it—and at last he had done so, so much as any one man could.—Baltimore *Sunday Sun.*

WHAT IS RELIGIOUS EDUCATION?

I. RELATION BETWEEN RELIGION, EDUCATION AND LIFE[1]

"No clear boundary," says Professor Thorndike, "separates man's education from the rest of his life. In the broadest sense his education *is* his life."[2] Correlative with this statement is that of Professor Dewey that education is a process of living and not a preparation for future living.[3] Harnach defines the Christian religion as "eternal life in the midst of time, by the strength and under the eyes of God."[4] Herein is represented the effort of each to express in terms of what he considers the highest value the meaning of life. Thus, "All values press for organization into wholeness of life."[5] In a broad, really inclusive sense, then, religion,

[1] In this paragraph we accept Professor Coe's evaluation of a definition as being merely a useful point of view for the organization of facts, "Psychology of Religion," p. 65, footnote.

[2] "Education," p. 4.

[3] "My Pedagogic Creed," p. 8.

[4] "What is Christianity?" p. 8.

[5] Coe, "Psychology of Religion," p. 70.

education, life are one.[6] Consistent with this point of view is the realization that education, in the true use of the word, is a unitary process,[7] and that the term "religious education" is, in a sense, an anomaly. To summarize: "Life and religion are one or neither is anything." There is no proper cleavage between secular and religious education; real religion is true education, and true education is at the heart religious.[8]

II. Implications of the Term "Religious Education"

"Religious education is an education that is permeated and vitalized by the religious spirit."[9] Accepting the standpoint of Christianity as to the wholeness of life, from which no human good can be excluded, it is simply education in the complete sense of that term.[10] As such, it is concerned not only with the relation between man and God, but also with the relation between man and man and the obligations that these relationships bring. Thus moral education becomes, not a correlative of religious education, but an integral part. Similarly, religious education can not be limited to mere doctrinal or Biblical instruction, an unfortunate differentiation of the term which is doubtless largely at the basis of the conflict seeking to exclude the public school as an agency.[11] We are herein concerned, not with the acquisition of a theology, but with development—the development of personalities who are attaining self-realization and express themselves in social relationships, in a manner consistent with their sense of values and their consciousness of a perfect personality with whom they commune and with whose will they are in accord. In applying the term "religious education" to the schools we realize a differentiation from so-called general or secular education merely in so far as to insure in the curriculum adequate, systematic provision for the creation of right ideals and standards of conduct and vital instruction in the principle of good in the ordering of the universe. The inducing of right responses, the formation of character, must not be left to chance or inefficiency.

III. Aims of Religious Education[12]

The principal aims of religious education are (a) to bring the individual into immediate relation with the thoughts, feelings, toils and struggles of the people about him, in order to develop a sensitive and enlightened social conscience; (b) to bring about a recognition of the permanence of religious ideals as a fact of human nature and human history; (c) to lead to an understanding of ethical principles; (d) to quicken in the individual a sense of national and universal brotherhood; and (e) to bring the individual into conscious relation with God; in short, to form right habits, attitudes and motives; to develop the science and art of right living; to turn out real world-helpers and problem-solvers; to set up in the individual the disposition and power to do righteousness at all times.

IV. Religious Education in the Public Schools

The maxim that the state must have nothing to do with religion is false,[13] for we can not have religious freedom without having our children taught lessons in moral and spiritual

[6] This view was reached by the writer before reading Professor Coe's work on "Education in Religion and Morals," in which substantially the same conclusion is expressed (see the summary made by Blessing in "Religious Instruction in the Public Schools of the United States," p. 82).

[7] See Butler, "Meaning of Education," p. 179.

[8] See Cochran, *Religious Education* IV, p. 167.

[9] Cope, *Religious Education* VIII, p. 118.

[10] Coe, "Education in Religion and Morals," p. 29.

[11] *Ibid.*, p. 353–354, footnote; also Brown, *Religious Education* II, pp. 121–126.

[12] See Votaw, *Religious Education* IV, pp. 295, 414–415; "Aims of Religious Education" (Proceedings of the Third Annual Convention of the Religious Education Association); King, *Religious Education* IV, pp. 295, 304; Butler, *ibid.* IV, p. 555; Doggett, *ibid.* V, p. 203; Cochran, *ibid.* V, p. 118.

[13] See Matthew Arnold's statement made in connection with his study of German universities (1874), quoted by Cochran, *Religious Education* IV, p. 167; also Coe, "Education in Religion and Morals," p. 352; Johnstone, quoted in "Essential Place of Religion in Education" (Monograph Published by National Education Association; address The Secretary, National Education Association, Washington, D. C.), p. 103.

truth.[14] Religion is a public need,[15] for no education is adequate to provide for complete citizenship which does not result in moral ideals and obligations, social aims and duties, civic righteousness and human progress,[16] basic to which result it is the most earnest conviction of many thinkers that there must be a supreme faith in the Eternal Goodness and confidence in the divine nature of man.[17] The school should not relegate the function of religious instruction to the church, for, first, the church unaided is not able to cope with the situation. Although over fourteen million Protestant and nominally Protestant, nearly two million Catholic, and eighty-seven thousand Jewish children and youth under twenty-five years of age are in Sunday, parochial or congregational schools, nearly thirty-seven million, or sixty-nine per cent. of the children of the nation, are not in religious schools.[18] Moreover, it has been found that hundreds of towns and many whole counties are without adequate churching; in fact, seventeen counties in the central and far western states were reported in a recent survey as without any churches.[19] Secondly, religion should not stand in the child's mind as something apart from daily life.[20] The state has the right to compel the inclusion of religious education in the schools, for it should safeguard the welfare of the child and provide for its own protection intelligent and cooperative citizens,[21] and intellectual training is no guarantee of right conduct,[22] for crime has increased in spite of the larger percentage of pupils in school, and the delinquency is attributable not to physical inability nor to immigration merely;[23] moreover, men in public life unite in calling for education that will result in character as well as cleverness.[24] Moral instruction alone will not meet the need,[25] for considerable provision for moral training has already been made;[26] and according to prominent authorities in our own and other countries, moral instruction to be most effective should be grounded on religions.[27] Religion *in* education, not religion *and* education, seems to be the solution.[28]

V. Conclusion

Rabbi Hirsch says that the greatest failure of the nineteenth century has been that of religious education. "In educating the head and not the heart and soul, the public schools are failing at a crucial point."[29] The prevalence of sectarianism is no excuse. Indeed, the watchfulness of denominations may be expected to safeguard the teaching of non-sectarian religion.[30] Furthermore, experiments in our own country have been carried on with gratifying results.[31] The question will undoubtedly be raised, "Can religion be taught?"[32] Even if we answer this in the negative, it does not lessen our responsibility for making an evaluation of life in religious terms the goal of our educational process. After all, the teacher is the key to the situation. This is empha-

[14] See "Essential Place of Religion in Education," p. 110.

[15] Arnold, quoted by Cochran, *Religious Education* IV, p. 167.

[16] Votaw, *Religious Education* IV, p. 416.

[17] See the formulation of this conviction by Dole, quoted in *Religious Education* X, p. 4; see also "Pronouncement on Education and Religion in Japan," *Religious Education* XI, pp. 289–290.

[18] "World Survey by the Interchurch World Movement of North America," American Volume, p. 210.

[19] *Ibid.*, p. 65.

[20] "Essential Place of Religion in Education," p. 98.

[21] Compare "Essential Place of Religion in Education," p. 102.

[22] *Religious Education* IV, pp. 552–553.

[23] See "Essential Place of Religion in Education," pp. 97–98.

[24] *Ibid.*, pp. 97, 102–103.

[25] *Ibid.*, pp. 95–96.

[26] Strayer, *Religious Education* V, pp. 599–611.

[27] See Bryce, *Religious Education* IV, p. 33; Thompson, *ibid.* V, pp. 109–116; authorities quoted in "Essential Place of Religion in Education," pp. 95–98, 103; Strong, quoted by Crooker, "Religious Freedom in American Education," p. 188; "Pronouncement on Education and Religion in Japan," *Religious Education* XI, pp. 289–290.

[28] Tapy, quoted by Bagley, *Religious Education* V, p. 637; compare Butler, "Meaning of Education," p. 198.

[29] Quoted in "Essential Place of Religion in Education," p. 97.

[30] See "Essential Place of Religion in Education," pp. 107–108.

[31] *Ibid.*, pp. 33–34, 108; see also Wood, "School and College Credit for Outside Bible Study."

[32] See Main, *Religious Education* IV, p. 483; Coe, "Can Religion be taught?"

sized repeatedly by educators.[33] "The man back of the work is the real essence of religious education."[34] This is true whether we use religious education in the broader or the narrower sense. The teacher should be the kind of man he wishes his pupils to become. "We know of no spontaneous religious generation."[35] Furthermore, "Whether they will or no, the personal attitude of teachers toward religion makes an impression. Religion or irreligion is present in the schools just as surely as teachers are present."[36] Good teachers should not be taken as a matter of course, but of necessity.[37] It is to the teacher whose personality glows "with a love of truth, sympathy with his students, enthusiasm for noble causes and devotion to high civic and spiritual ideals,"[38] that we must, in large measure, look for the accomplishment of religious education.

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EDUCATIONAL RESEARCH AND STATISTICS

THE PERMANENCE OF VOCATIONAL INTERESTS AFTER THREE YEARS

OF what value are the vocational interests expressed by junior high-school pupils? The extent to which such interests must be taken into consideration by educators depends chiefly upon their permanence; that is, upon the length of time that these interests continue to be held by the pupils. In order to determine the permanence of these interests a study was undertaken in the fall of 1922. The entering, or 7B, pupils of eight of the junior high schools of Baltimore comprised the test group. This group consisted of 1,467 pupils—708 boys and 759 girls. They were given two intelligence tests—the Illinois and the Mentimeter—and the average of the two I. Q.'s thus secured for each pupil was used as the basis of classification. The choice was uncontrolled; each child was given a blank and asked to name the occupation that he would most like to enter. Follow-up questionnaires were administered three times within the first year of the study. The results of the investigations of this first year have already been published.[1]

In June, 1925, when those pupils who had made normal progress were at the end of their junior high-school careers, another follow-up questionnaire was administered. It was found impracticable to administer this questionnaire in all the eight schools originally included in the study. Finally, three of them were selected and it is with the information secured from the pupils in these three schools that this article deals. This questionnaire was given to all pupils of the original group still in these schools, to those who had been retarded as well as those who had been promoted regularly.

In 1922 these three schools contained 47 per cent. of the pupils included in the original study; hence, the follow-up group may be considered satisfactorily representative. This follow-up group originally consisted of 696 pupils—314 boys and 382 girls. At the end of the three-year period there were 260 survivals—88 boys and 172 girls. Vocational interests were arbitrarily divided into the fifteen following classes:[2] agriculture, manufacturing, mechanical industries, transportation, trade, public service, engineers, physicians, lawyers, teachers, entertainers and artists, other professional service, domestic and personal service, clerical service, no choice. However, due to lack of space, certain combinations of these classes are here effected and the results presented in terms of these larger groups. Here all six professional groups are united. Agricultural, manufacturing and mechanical industries are grouped under the last-mentioned

[33] No fewer than twenty-four references read emphasized the importance of the teacher (see especially Starbuck, *Religious Education* IV, p. 83; and Bagley, *Religious Education* V, pp. 612, 637).

[34] Main, *Religious Education* IV, p. 484.

[35] Doggett, *Religious Education* V, p. 203.

[36] Coe, "Education in Religion and Morals," p. 352.

[37] Main, *Religious Education* V, p. 331.

[38] See Mitchell, *Religious Education* V, p. 108.

[1] Franklin, E. E., "The Permanence of the Vocational Interests of Junior High School Pupils." The Johns Hopkins Press. Baltimore, 1924.

[2] In terms of this fifteen-fold classification, the following percentages of permanency were found to obtain: boys' interests—46 per cent.; girls'—69 per cent.; total group—61.2 per cent. At the end of the first year of the study, the corresponding percentages were: boys'—62 per cent.; girls'—71 per cent.; total group—67 per cent.

name. Domestic and personal service, public service and transportation are classed as general service. Trade and clerical service remain as before. Trade here indicates business activities, not the work of mechanics. These more comprehensive groups are shown in Table I. In order to ascertain the permanence of the pupils' vocational interests, the interests originally expressed in 1922 by these 260 survivors were distributed as were those expressed in June, 1925, and both distributions are shown in the accompanying Table I for the purpose of comparison. This double-entry table shows the relationship of the results for the two periods under consideration. The records for the boys are kept separate from those for the girls. The rows indicate the choices for the fall, 1922, period and the columns those for June, 1925. Hence, the entry for any pupil whose choice falls in the same group on both occasions will appear in the diagonal of boxes extending from the upper left-hand corner of the table to the lower right-hand corner. The number of cases appearing in this diagonal divided by the total number entered in the table gives the percentage of permanency. The number in the upper left-hand corner of a box represents the boys; the number in the lower right-hand corner represents the girls.

TABLE I

PERMANENCY OF VOCATIONAL CHOICES

Distribution of Choices—June, 1925.

Distribution of Choices—Dec., 1922	Professional	Clerical	Trade	Mechanical Industries	General Service	No Choice	Totals for Boys	Totals for Group	Totals for Girls
Professional	47 / 54	6 / 13	8 / 2	2	1	1 / 3	64	73	137
Clerical	1 / 15	9 / 78	2			1	12	94	106
Trade	4 / 2	2 / 1	3				9	3	12
Mechanical Industries	2						2	0	2
General Service		1					0	1	1
No Choice	1					1	1	1	2
Totals for Boys	54	17	13	2	0	2	88		
Totals for Girls	72	93	2	0	1	4		172	
Totals for Group	126	110	15	2	1	6			260

PERMANENCY

	No. Cases	Percentages
Boys	60	68.2%
Girls	132	76.7%
Total Group	192	73.8%

Table I shows that 68 per cent. of the boys and 77 per cent. of the girls, or 74 per cent. of the entire group, adhered to their original types of vocational interests throughout their junior high-school careers. At the end of the one-year study, 72 per cent. of the boys and 80 per cent. of the girls, or 75 per cent. of the entire group, were found to have maintained their

original choices.[3] Time seems to have little or no effect upon the pupil who has made up his mind. The high degree of constancy of the percentage of permanency over so long a period of time indicates that the interests expressed by entering junior high school pupils are significant and worthy of consideration.

Several further problems that invite attention are those concerned with pupil elimination. What is the relationship of intelligence to elimination? For the purpose of securing an answer to this question, the pupils were divided according to their I. Q.'s into three groups as follows: I, the highest 30 per cent.; II, the middle 40 per cent.; III, the lowest 30 per cent. (this classification was applied to the entire 1,467 pupils; hence, the distribution for the follow-up group considered in this article is more or less inaccurate).

TABLE II

PUPILS SURVIVING AT THE END OF THREE YEARS[4]

	Boys			Girls			Total Group		
	No., Dec., 1922	No., June, 1925	Percentage of survivals	No., Dec., 1922	No., June, 1925	Percentage of survivals	No., Dec., 1922	No., June, 1925	Percentage of survivals
I	118	39	33.1	84	47	56.0	202	86	42.6
II	127	36	28.3	175	89	50.9	302	125	41.4
III	69	13	18.8	123	36	29.3	192	49	25.5
Totals	314	88	28.0	382	172	45.0	696	260	37.4

Table II shows that five pupils out of eight were eliminated during the three-year period. A boy entering junior high school is a third again as likely to be eliminated during the three-year period as is a girl. The probability that a pupil will survive is evidently dependent directly upon his intelligence. Pupils of less than average intelligence are one and three fourths as likely to be eliminated during the three-year period as are those of superior intelligence. What is the relationship of interest to elimination? For the purpose of securing an answer to this question, the vocational groups were classified as professional and non-professional. The professional division comprises the following groups: engineers, physicians, lawyers, teachers, entertainers and artists and other professional services. The other classes, except the "no-choice" group, constitute the non-professional division.

TABLE III

PUPILS SURVIVING AT THE END OF THREE YEARS[4]

	Boys Per cent.	Girls Per cent.	Total Group Per cent.
Professional division	36.2	50.3	42.5
Non-professional division	18.0	41.0	33.0
Totals	28.0	45.0	37.4

The most striking evidence presented in this table is that given in the case of the boys. A boy with a professional interest is twice as likely to spend the full three years in the junior high school as is his comrade with a non-professional interest. For the entire group, the children with professional interests are 30 per cent. more likely to survive than are those with non-professional preferences.

CONCLUSIONS

(1) The vocational interests of pupils show a high degree of permanence during the junior high school period. After three years, three children out of four still adhere to their original type of vocational preference and three out of five still cling to the actual choices which they originally expressed.

(2) Out of eight pupils entering the junior high school, five have been eliminated when the last roll is called three years later.

(3) An entering boy's chances of completing junior high school are only about five eighths as good as a girl's.

(4) A child of less than average intelligence has scarcely three fifths as good a chance of surviving as has one of superior intelligence.

(5) The pupils with non-professional interests have but three fourths as good a chance of surviving as those with professional interests. In the case of the boys alone, the ratio is 1 to 2.

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[3] Franklin, E. E., "The Permanence of the Vocational Interests of Junior High School Pupils," p. 51.

[4] It is obvious that the percentages of elimination may be determined by deducting each of the percentages given in this table from 100 per cent.